

WHAT IS CLAIMED IS:

1. An apparatus for selecting one out of two functions, comprising:
a first entity having a first function, a second function, at least one detector and a function select mechanism;
a second entity having at least one of the first function and the second function; and
an interface for connecting the first entity and second entity, the interface connected to the at least one detector;

wherein the at least one detector detects a function of the second entity when connected to the first entity, and the function select mechanism selects one out of the first and second functions in the first entity in response to an output of the at least one detector corresponding to the detected function.

2. The apparatus as defined in Claim 1, wherein the first function and the second function are a host function and a device function, respectively.

3. The apparatus as defined in Claim 1, wherein the at least one detector is two detectors.

4. The apparatus as defined in Claim 1, wherein the detector includes a comparator.

5. The apparatus as defined in Claim 3, wherein the two detectors each include a comparator.

6. The apparatus as defined in Claim 1, wherein the function select mechanism includes a microprocessor.

7. The apparatus as defined in Claim 1, wherein the interface is a Universal Serial Bus.

8. The apparatus as defined in Claim 1, wherein the first entity and second entity are both a digital camera.

9. The apparatus as defined in Claim 1, wherein the first entity is a digital camera and the second entity is a printer.

10. ~~10.~~ An apparatus for selecting one out of two functions, comprising:
a first entity having a first function, a second function, at least one
detector and a function select mechanism;
a second entity having one of the first function and the second function;
5 and
an interface for connecting the first entity and second entity, the interface
connected to the at least one detector;
wherein the at least one detector detects a function of the second entity
when connected to the first entity, and the function select mechanism selects one
10 out of the first and second functions in the first entity in response to an output of
the at least one detector corresponding to the detected function.

11. ~~11.~~ An apparatus for selecting one out of two functions, comprising:
a first entity having a first function, a second function, a detector and a
function select mechanism;
15 a second entity having one of the first function and the second function;
and
an interface for connecting the first entity and second entity, the interface
connected to the detector;
wherein the detector detects a function of the second entity when
20 connected to the first entity, and the function select mechanism selects one out
of the first and second functions in the first entity in response to an output of the
detector corresponding to the detected function.

12. The apparatus as defined in Claim 11, wherein the function select
mechanism includes a field programmable gate array or gate array.

25 ~~13.~~ A method of selecting one out of a first function and a second function a
first entity has, with respect to a second entity that has at least one of the first and
second functions, the method comprising:

activating a first power source to the first entity;
connecting the first entity to the second entity via an interface;
30 detecting at least one voltage on the interface by connecting a first
resistor between the interface and a second power source;

determining first if the detected voltage is over a threshold;
if so, connecting a second resistor between the interface and the ground;
detecting a divided voltage derived from the second power source and a
ratio of the second resistance to the second resistance plus the first resistance;
5 determining second if the detected divided voltage is over the threshold;
if so, selecting the first function;
if the detected voltage is not over the threshold at the first determination,
deactivating the first power source;
connecting a third resistor between the interface and the second power
10 source;
waiting for a specified packet to be sent;
if the packet is received, selecting the second function.

14. The method as defined in Claim 13, wherein selecting the first function
and the second function is selecting between a host function and a device function.

15. A method of selecting one out of a first function and a second function a
first entity has, with respect to a second entity that has one of the first and second
functions, the method comprising:

providing a power source to the first entity;
connecting the first entity to the second entity via an interface;
20 detecting at least one voltage on the interface;
determining if the detected voltage is over a threshold;
if so, selecting the first function; and
if not, selecting the second function.